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OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P. 1940 DUKE STREET ALEXANDRIA, VA 22314				
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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* HIROYUKI KURIMURA, JUN WATANABE,  
TAKESHI ODA, and NORIHIRO SHIMIZU

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Appeal 2010-000154  
Application 10/549,574  
Technology Center 1700

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Decided: July 2, 2010

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Before ADRIENE LEPIANE HANLON, LINDA M. GAUDETTE, and  
KAREN M. HASTINGS, *Administrative Patent Judges*.

HASTINGS, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellants appeal under 35 U.S.C. § 134(a) from the Examiner's final rejection of claims 1-10. An oral hearing was held on June 9, 2010. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

## BACKGROUND

The invention relates to a linear block copolymer composition.

Claim 1 is illustrative:

1. A linear block copolymer composition, comprising from 55 to 95 mass% of a vinyl aromatic hydrocarbon and from 5 to 45 mass% of a conjugated diene as monomer units;

wherein:

the linear block copolymer composition is a mixture of a linear block copolymer having at least three types of polymer blocks with different molecular weights, each comprising a vinyl aromatic hydrocarbon as monomer units and represented by the following formula:



where S is a polymer block comprising a vinyl aromatic hydrocarbon as monomer units, and B is a polymer block consisting of conjugated diene monomer units; and further,

(1) the molecular weight distribution ( $M_w/M_n$ ) of a mixture of the polymer blocks each comprising a vinyl aromatic hydrocarbon as monomer units, is within a range of from 3.35 to 6, and

(2) in a gel permeation chromatogram of a mixture of the polymer blocks each comprising a vinyl aromatic hydrocarbon as monomer units,  $M1/M2$  is within a range of from 12.5 to 25, where  $M1$  is the peak top molecular weight corresponding to a peak at which the peak top molecular weight becomes maximum among peaks forming a proportion of the area of at least 30% to the whole peak area, and  $M2$  is the peak top molecular weight corresponding to a peak at which the peak top molecular weight becomes minimum among peaks at which the peak top molecular weight is at most 50,000 and which form a proportion of the area of at least 20% to the whole peak area.

The Examiner has maintained, and Appellants seek review of, the rejection of all the claims under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under § 35 U.S.C. 103(a) as being unpatentable over Moczygemba (US 5,393,838, issued Feb. 28, 1995).<sup>1</sup>

Appellants do not present any arguments regarding the provisional obviousness-type double patenting rejection made in the Final Office Action over copending Application No. 10/549,572<sup>2</sup>. Accordingly, we summarily affirm the Examiner's obviousness-type double patenting rejection.

Appellants argue all of the claims rejected over Moczygemba as a group (App. Br. 4-9). Thus, in accordance with 37 C.F.R. § 41.37(c)(1)(vii), we select independent claim 1 as the representative claim on which our discussion will focus.

#### ISSUE ON APPEAL

Has the Examiner erred in his determination that the claimed invention is anticipated or alternatively obvious because the Examiner has not provided a basis for concluding that the comparative example polymers of Moczygemba have the molecular weight features of claim 1, as the Appellants contend? (*See*, Reply Br. 2).

We answer this question in the negative.

#### ANALYSIS with FACTUAL FINDINGS

We rely upon the factual findings of the Examiner as set out in the Final Office Action and the Answer with respect to Moczygemba, including

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<sup>1</sup> The Examiner withdrew the rejection based on Moczygemba 569 (US 5,705,569 issued Feb. 28, 1995) (Ans. 2-3).

<sup>2</sup> Application No. 10/549,572 is now U.S. Patent No. 7,714,067 issued May 11, 2010.

the Response to Argument section (Final Office Action pp. 2-4; Ans. pp. 3-6), unless expressly overturned or set aside herein.

Appellants do not dispute that the comparative Examples of Moczygemba relied upon by the Examiner (Ans. 5; Moczygemba col. 13, ll. 60-61; Table VIII) would have the recited block copolymer structure (Reply Br. *generally*). Rather, Appellants contend that the Examiner may not rely upon these comparative polymer examples under § 102 because the Examiner has not provided a basis for finding the comparative polymers have the claimed molecular weight features of claim 1 (Reply Br. 2).

The Examiner's position, however, is that the comparative examples of Moczygemba are "identical to those of Moczygemba's Table 6 [Table VI] in column 12 [that is, the inventive examples] except in that pure charges . . . are added instead of mixed charges" (Ans. 5). Thus, the Examiner implicitly found that the polymers of Moczygemba's comparative examples inherently have the claimed molecular weight features.

The Examiner's position is reasonable based on the record before us. Therefore, the burden properly shifted to the Appellants to show that the polymers in Moczygemba's comparative examples do not have molecular weights as recited in claim 1. *See In re Best*, 562 F.2d 1252, 1255 (CCPA 1977) (where "the claimed and prior art products are identical or substantially identical, or are produced by identical or substantially identical processes, the PTO can require an applicant to prove that the prior art products do not necessarily or inherently possess the characteristics of his claimed product"); *see also In re Spada*, 911 F.2d 705, 708 (Fed. Cir. 1990).

Appellants have not provided any evidence or persuasive technical reasoning to refute the Examiner's finding that Moczygemba's comparative

examples have the required molecular weight features recited in claim 1 (Ans. 4-5; *generally* App. Br., Reply. Br.).<sup>3</sup> Accordingly, Appellants have not persuaded us of error in the Examiner's implicit finding that the polymers of Moczygemba's comparative examples have the claimed molecular weight features (Reply Br. *generally*).<sup>4</sup>

In light of these circumstances, the weight of the evidence supports the Examiner's finding that the comparative examples of Moczygemba have the molecular weight features of claim 1.<sup>5</sup>

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<sup>3</sup> Only those arguments actually made by Appellants have been considered in this decision. Arguments which could have been made but Appellants chose not to make have not been considered and are deemed to be waived. *See* 37 C.F.R. § 41.37(c)(1)(vii) (2008).

<sup>4</sup> We agree, however, with Appellants that the formula of claim 1 precludes the coupling agent that is present in the inventive examples of Moczygemba (App. Br. 4-6; Reply Br. 1-2). The Examiner's position in this respect is not supported by the record, since the claim recites "B is a polymer block *consisting of* conjugated diene monomer units" (emphasis provided).

<sup>5</sup> With respect to the § 103 rejection, Appellants' contention that a *prima facie* case of obviousness cannot be made on the basis of Moczygemba's comparative examples is unavailing (Reply Br. 2), since it is well established that the prior art as a whole must be considered. It is also well settled that, in a § 103 inquiry, the fact that a specific embodiment is taught to be preferred is not controlling, since all disclosures of the prior art, including unpreferred embodiments, must be considered. *Merck & Co. v. Biocraft Laboratories, Inc.*, 874 F.2d 804, 807 (Fed. Cir. 1989). *See also In re Boe*, 355 F.2d 961, 965 (CCPA 1966) ("All of the disclosures in a reference must be evaluated for what they fairly teach one of ordinary skill in the art. Thus, . . . this court affirmed rejections based on art which we concluded rendered the claimed invention obvious to those of ordinary skill in the art despite the fact that the art teachings relied upon in all three cases were phrased in terms of a non-preferred embodiment or as being unsatisfactory for the intended purpose.").

We therefore affirm the Examiner's rejection of all the claims under 35 U.S.C. § 102. We also affirm the Examiner's rejection under 35 U.S.C. § 103.

**ORDER**

The Primary Examiner's decision is affirmed.

No time period for taking any subsequent action in connection with this appeal maybe extended under 37 C.F.R. § 1.136(a)(1).

**AFFIRMED**

PL Initial:  
sld

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